REMARKS

This responds to the Office Action mailed on July 12, 2006.

No claims have been canceled, amended, or added. As a result, claims 1-36 remain pending in this application.

For the convenience of the Examiner, Applicants' remarks concerning the claims will be presented in the same order in which the Examiner presented them in the Office Action.

Rejection of Claims 1-8 under 35 U.S.C. §101

Claims 1-8 were rejected under 35 U.S.C. §101. The Examiner asserted that they are directed to method steps that can be practiced mentally and therefore are directed to non-statutory subject matter. The Examiner further asserts that in claim 1, in the specific case where the workflow is not completed by a first workflow engine, the mere "assigning the workflow" does not produce a tangible result.

(1) Claim 1 Is Limited To A Practical Application Within The Technological Arts

To be statutory, a claimed computer-related process must either: (A) result in a physical transformation outside the computer for which a practical application in the technological arts is either disclosed in the specification or would have been known to a skilled artisan, or (B) be limited to a practical application within the technological arts.[1]

A claim is limited to a practical application when the method, as claimed, produces a concrete, tangible and useful result.[2]

The MPEP offers several examples of this type of claimed statutory process, which include the following: a method of controlling parallel processors to accomplish multi-tasking of several computing tasks to maximize computing efficiency.[3]

Very much in line with the MPEP example cited immediately above, Applicants' method recited in claim 1 – i.e., providing distributed queuing of workflows – is also a practical

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[1] MPEP 2106 IV.B.2.(b).
[2] MPEP 2106 IV.B.2.(b).ii.
[3] MPEP 2106 IV.B.2.(b).ii. citing *In re Bernhart*, 417 F.2d 1395, 1400, 164 USPQ 611, 616 (CCPA 1969).

application, because in at least one embodiment it is performed in a multi-tasking environment, as supported by the following statement from Applicants' written description:

> Each new request or message can be processed by a single workflow engine or by several workflow engines executing the request or message either concurrently or sequentially.[4]

(2) Claim 1 Is Limited To A Practical Application That Produces Tangible "Real World" Results

Applicants assert that claim 1 recites a method that produces tangible "real world" results, as opposed to "abstract" results. This should be clearly evident to any person of ordinary skill, simply from the recited subject matter, which speaks of various computer hardware and software elements, all of which are familiar to those skilled in the art, and all of which are adequately described and illustrated by Applicants' written description and drawings.

Independent claim 1 recites a method to be performed by a data processing system. The method includes operations that read *inter alia* on the operations of the flow diagram illustrated in Application FIG. 5 (described beginning page 9, line 29 through page 10, line 20). In 102, distributed queuing of workflows is provided among a plurality of workflow engines. In 104, a determination is made whether a workflow whose execution has been requested by a client has been completed by a first workflow engine. If so, the method goes to 106; otherwise, it goes to 108. In 106, an explicit and delayed acknowledgement is sent to the execution-requesting client, and the method ends. In 108, the workflow is assigned to another workflow engine.

Applicants' disclosure shows only computer resources for carrying out the process of claim 1. Applicants' disclosure contains absolutely no mention of mentally performing the process. The CCPA has held that this factor is determinative of whether a claim is directed to a statutory process.

> In the case now before us, the disclosure shows only machinery for carrying out the portrayal process. In fact it is the chief object of the invention to eliminate the drudgery involved in a draftsman's making the desired portrayals. Accordingly, a statutory process is here disclosed. Looking then to method claim 13, we find that it in no way covers any mental steps but requires both a 'digital computer' and a 'planar plotting apparatus' to carry it out. To find that the claimed process could be done mentally would require us to hold that a human mind is a digital computer or its equivalent . . . . [5] [Emphasis added]

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[4] Present application, page 7, lines 2-4.
[5] *In re Bernhart*, 417 F.2d 1395, 1401, 164 USPQ 611, 617 (CCPA 1969).

For the above reasons, Applicants respectfully request the Examiner to withdraw the rejection of claim 1 under 35 U.S.C. §101 as being directed to non-statutory subject matter.

Because dependent claims 2-8 are similarly directed to operations performed on computer resources (e.g. load manager, middleware, and certified message receiver, *inter alia*), Applicants also assert that these claims are directed to statutory subject matter, and Applicants respectfully request the Examiner to withdraw the rejection of claims 2-8 under 35 U.S.C. §101 as being directed to non-statutory subject matter.

Rejection of Claims 1-36 Under 35 U.S.C. §103(a) as Unpatentable over Campbell in View of Sasou and Further in View of Northrup

Claims 1-36 were rejected under 35 U.S.C. §103(a) as being unpatentable over Campbell et al. (U.S. 2001/0024497 A1) in view of Sasou et al. (U.S. 5,463,208) and further in view of Northrup (U.S. 2003/0101211 A1).

Campbell appears to disclose (see Abstract) a system and method for servicing multi-media customer communications to geographically distributed agents from multiple call center sites via the telephone network and a global data communications network. Applicants could find no disclosure in Campbell concerning sending an explicit and delayed acknowledgement to an execution-requesting client if a workflow is completed by a first workflow engine, else assigning the workflow to a second workflow engine. It is noted that the Examiner concedes this in his Office Action.

In the Office Action, the Examiner erroneously defines a "delayed acknowledgement message" as notification when the final task is completed.[6]

Applicants' disclosure defines a "delayed acknowledgement message" as follows:

> Acknowledgement message ACK_A to client process A may be referred to as a "delayed acknowledgement message", because such acknowledgement message is only sent to client process A upon the successful completion of the final task T_{FT} by workflow 72. Such an acknowledgement message can be trusted by the client process, in that the client process can assume that the requested function has been successfully completed. [7]

It should be clear to the Examiner that a "delayed acknowledgement message" is only sent upon the successful completion of the final workflow task.

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[6] Office Action, paragraph 9.
[7] Instant application, page 8, lines 10-15.

Sasou appears to disclose a main CPU 102 (FIG. 1) and a series of sub-CPU's 141A, 142A-B, and 143A (FIG. 1). The plurality of sub-CPU's independently execute a series of tasks set in advance in accordance with a predetermined sequence (see Abstract). A notification section in the last sub-CPU supplies a processing completion signal indicating completion of the series of tasks to the main CPU when the last task is completed. It is noted that each sub-CPU appears to always perform the same unique task, and that there is just one sub-CPU to perform such unique task. It is further noted that sub-CPU 142B always sends a notification signal 30 to the next sub-CPU 143A, whether recording is successfully completed on the card 105 or not (see column 5, lines 50-58).

This is in contrast to Applicants' claim 1, for example, in which a notification, in the form of an explicit and delayed acknowledgement, is sent to the execution-requesting client if a workflow is successfully completed by a first workflow engine, otherwise assigning the workflow to a second workflow engine.

Northrup appears to disclose a computer-implemented method in which a workflow courier determines whether a workflow is complete. If it is not complete, the workflow courier determines another appropriate stage of the workflow to be completed and transmits the workflow courier to a next network node associated with an actor authorized to perform the another appropriate stage (claim 30). However, Applicants could find no disclosure within Northrup concerning sending an explicit and delayed acknowledgement to an execution-requesting client if a workflow is completed by a first workflow engine, else assigning the workflow to a second workflow engine.

To establish a *prima facie* case of obviousness under 35 U.S.C. §103, the prior art reference (or references when combined) must teach or suggest every limitation of the claim.[8]

As mentioned above, the notification in Sasou is totally different from the explicit and delayed acknowledgement in claim 1. The former is always given, whereas the latter is only given when the workflow is successfully completed, and, if it isn't successfully completed, the workflow is assigned to a second workflow engine.

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[8] *In re Royka*, 490 F.2d 981, 180 USPQ 580 (CCPA, 1974). MPEP § 2143.

Further, as asserted by Applicants above, Northrup does not appear to send an explicit and delayed acknowledgement to an execution-requesting client if a workflow is completed by a first workflow engine.

Thus, Applicants respectfully assert that a *prima facie* case of obviousness has not been established, because the references, even when combined in the manner suggested by the Examiner, fail to disclose all of the elements as recited in Applicants' claims. Sasou fails to disclose "sending an explicit and delayed acknowledgement to an execution-requesting client, else assigning the workflow to a second workflow engine". Nor does Northrup disclose this.

For the above reasons, independent claim 1 should be found to be allowable over any combination of Campbell, Sasou, or Northrup, and Applicants respectfully request that the rejection of claim 1 under 35 U.S.C. §103(a) as being unpatentable over Campbell in view of Sasou and Northrup should be withdrawn.

If an independent claim is nonobvious under 35 U.S.C. §103, then any claim depending therefrom is nonobvious.[9]

Claims 2-8, which depend from claim 1, directly or indirectly, and incorporate all of the limitations therein, are also asserted to be allowable for the reasons presented above.

Independent claims 9, 17, 22, 27, and 32 recite similar limitations to those recited in claim 1, so they should likewise be found patentable over any combination of Campbell, Sasou, and Northrup. Further, all of the claims dependent, directly or indirectly, from independent claims 9, 17, 22, 27, and 32 should also be found allowable.

Additional Elements and Limitations

Applicants consider additional elements and limitations of claims 1-36 to further distinguish over the cited references, and Applicants reserve the right to present arguments to this effect at a later date.

[9] MPEP §2143.03.

Conclusion

Applicants respectfully submit that claims 1-36 are in condition for allowance, and notification to that effect is earnestly requested. The Examiner is invited to telephone Applicants' attorney Ann M. McCrackin (located in Minneapolis, Minnesota) at (612) 349-9592 or Applicants' below-signed attorney (located in Phoenix, Arizona) to facilitate prosecution of this application.

If necessary, please charge any additional fees or credit overpayment to Deposit Account No. 19-0743.

Respectfully submitted,

MINGQIU SUN ET AL.

By their Representatives,
SCHWEGMAN, LUNDBERG, WOESSNER & KLUTH, P.A.
P.O. Box 2938
Minneapolis, Minnesota 55402
(602) 298-8920

By /  /
Walter W. Nielsen
Reg. No. 25,539